


# AGRICULTURAL ENGINEERING



Friday March 29  
10 am-8 pm

19

Man-Made World

Saturday March 30  
9 am-3 pm

74

# Engineering Open House

College of Engineering   University of Illinois at Urbana-Champaign

Agricultural Engineering  
The Profession with America's Future

1973 ENGINEERING  
OPEN HOUSE  
March 29 & 30, 1974

Welcome to Agricultural Engineering Open House. The Department of Agricultural Engineering bridges the gap between two great disciplines, engineering and agriculture. The department is actually a part of the College of Engineering, but the cooperation and interaction between the Agricultural Engineers and the College of Agriculture is always evident.

The Agricultural Engineering curriculum offers a student a choice of interests. The curriculum has four areas of specialization.

Many students choose to major in Power and Machinery. After these students graduate they may be engaged in farm tractor and machinery development, design, plant engineering, or consulting.

Soil and water area problems provide excellent opportunities for many young engineers. An increasing awareness of the necessity for the planned use of our water and soil resources on every level of activity - county through international - has set new standards for the engineers who must cope with problems of water shortage, flood control and optimization of agronomic production, through more efficient drainage, irrigation, and erosion control practices.

The Processing graduate may be involved with any sort of problem in grain or materials handling, drying or storage. The processing graduate has knowledge of electronics, psychrometry and may work in many areas of industry.

The Farm Structures graduate has expertise in design principles, in farm buildings, strength of materials, foundation engineering, concrete design, and new innovations in waste management. The area of waste management is a very good area for a structures graduate to do his service to society and agriculture.

The interdisciplinary background of the agricultural engineer serves him well in dealing with problems, each of which involves a multiplicity of public interests. For men capable of applying new concepts of hydrology, hydraulics, construction, and machinery design, the opportunities are great.

Thank you for touring the Agricultural Engineering Department. Please feel free to ask questions. If you would like more information about Agricultural Engineering, please write to Dr. Frank B. Lanham, Head, Agricultural Engineering Department, University of Illinois, Urbana, Illinois 61801.

Visit Us Again  
We enjoyed being your host.

## Exhibits

### Power and Machinery

1. A Safety Device to Retain the "Quality of Life"
2. Programmable Calculator Demonstration
3. Erosion and Yield Comparison of Tillage - Planting Practices for Corn
4. Dual Tracer Technique for Measuring Spray Drift
5. Vibratory Tillage Tests, "Tool Force Predicted in Artificial Soils
6. Muffler Radiation
7. Improved Soybean Header
8. Which Non-Symmetrical Fan is Quietest
9. "Pressure Tank Simulations" by Analog Computer
10. "Eco-Log", Recycling of Waste Cups into Fireplace Logs

### Structures and Environment

11. Pit Ventilation System
12. Energy-Efficient Farm
13. Fiber Reinforced Concrete with Wall Panel Systems
14. Hailstone Damage to Siding
15. Midwest Plan Service
16. Waste Management
17. Models of Confinement Systems

Soil and Water

18. Soil Resistance Network
19. Nitrate Reduction
20. Tile Finder
21. Model Oxidation Ditch
22. Weir Model

### Processing

23. Silica Gel Grain Dryer
24. Grain Suffocation
25. Pneumatic Conveying
26. Soybean-Banana Candy Bar
27. Progress of Drying Front Through Corn
28. Refrigeration Unit
29. Grain Analyzers

30. ASAE Branch Exhibit
31. ASAE Burrill Street Exhibit
32. Information Table
33. John Deere Sound Guard Exhibit